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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/929,615	08/13/2001	Darrell J. Metcalf		9176

7590 09/05/2003
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905 N. Oak Avenue
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EXAMINER

LAO, LUN YI

ART UNIT	PAPER NUMBER
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2673

DATE MAILED: 09/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/929,615

Applicant(s)
Metcalf

Examiner
Lun-yi Lao

Art Unit
2673



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Aug 7, 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, “the Pixelated-image display apparel” cited in claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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3. Claims 1, 2, 12, 15 and 19-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albert et al(6,252,564) in view of Fitch(5,912,653) and Usuda(5,455,906).

As to Claims 1, 2, 12, 15 and 19-28, Albert et al teach wearable pixelated apparel comprising at least one flexible lightweight pixelated material is shaped to conform to a three-dimensional portion of a human body(see figure 9; column 18, lines 51-68 and column 19, lines 1-9) and an image apparatus(see figures 6A, 10; column 13, lines 62-67; column 14, lines 1-23; and column 19, lines 16-31). The image apparatus comprising one control circuit; an intelligent controller(340) and a power source(320)(see figures 6A, 6B; column 13, lines 62-67 and column 14, lines 1-64).

Albert et al fails to disclose a display apparel having a playback means; a user interface means and controller software.

Fitch teaches a display apparel having a digital media content playback means(see figure 3 and column 3, lines 29-33); a user interface means(52, 54) for a user to communicate digital media content(see figure 6 and column 3, lines 60) and controller software(EEPROM)(see figure 6 and column 5, lines 21-40). It would have been obvious to have modified Albert et al with the teaching of Fitch, so a display apparel could receive external video signal from different input rather than an antenna and a user could review a display image as the user want.

Albert et al as modified fail to disclose imagery according to the size and shape of lest one pixelated material(apparel-whole).

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Usuda teaches the size and shape of a display image could be changed according the pixelated material(the size and shape of the display)(see figures 2a, 7 and column 10, lines 3-6). It would have been obvious to have modified Albert et al as modified with the teaching of Usuda, since Albert et al have disclosed the shape of images on a display could be changed by an operator(see figure 9; column 19, lines 1-9 and lines 46-50) and so the same amount of display content could be presented on different size and shape of a display.

As to claims 2, 12, 15 and 26, Albert et al teach at lest one portion of perimeter edge of the pixelated material segments is adjoined(zipper or tongue-in-groove fastener) to at lest one portion of perimeter edge of another segments(see figures 8A-8D and column 17, lines 1-8).

As to claim 21, Fitch teaches a pre-recorded material playback device(see figures 3, 6; column 1, lines 25-47 and column 3, lines 29-44).

As to claim 19, Albert et al teach an optical communication(see figures 6, 10 and column 19, lines 33-44).

As to claims 22-25, Albert et al teaches a display content having video game advertisement and promotional message(see figure 10 and column 20, lines 17-28).

4. Claims 3-11, 13, 14 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Albert et al(6,252,564) in view of Fitch(5,912,653), Usuda(5,455,906) and Bastiaens et al(6,462,859).

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As to claims 3-11, 13, 14 and 16-18, Albert et al as modified fail to disclose a heat-sealed, sonic-weld joint or hook-and-loop fastener, stapled joint, glued or adhesive joint, riveted joint, button-hole joint, sewed or stitched seam joint or knotted seam joint.

Bastiaens et al teaches a heat-sealed, sonic-weld joint and mechanical sealing joint(hook-and-loop fastener, stapled joint, glued or adhesive joint, riveted joint, button-hole joint, sewed or stitched seam joint or knotted seam joint)(see column 10, lines 25-28). It would have been obvious to have modified Albert et al with the teaching of Bastiaens et al, since Albert et al has disclose a plurality of displays could be joined together by connector(see figures 8A-8D) and a heat-sealed, sonic-weld joint or mechanical sealing joint is an alternative way to joint a plurality of display together.

Response to Arguments

5. Applicant's arguments filed on August 20, 2003 have been fully considered but they are not persuasive.

Applicant argues that Albert et al, Fitch and Usuda do not teach the shape of display image in conformance with the size and the shape of least of one pixelated material on page 3. The examiner disagrees with that since Usuda teaches the size and shape of a display image could be changed according the pixelated material(the size and shape of the display)(see figures 2a, 7 and column 10, lines 3-6) and Albert et al have disclosed the shape(any other suitable information)

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of images on a display could be fitted on different size and shape of display(a wearable display on a shoes, wallets or clothes; etc.)(see figure 9; column 19, lines 1-9 and lines 46-53).

Applicant argues that Albert does not teach highly flexible and lightweight pixelated material shaped to conform a three-dimensional portion of a human body on page 3. The examiner disagrees with that since Albert teaches a flexible display are incorporated into clothing(for a three-dimensional human body) to provide a wearable display(see figure 9; column 2, lines 11-16; column 18, lines 51-53 and column 19, lines 1-9).

Applicant argues that Albert does not address how to contiguously display image on adjacent entire apparel segments on page 4. The examiner disagrees with that(see figures 8A-8D; column 16, lines 35-50 and column 17, lines 1-8).

Applicant argues that Albert only placed display images on a display with a rectangular shape on page 4. The examiner disagrees with that since Albert has placed images on a display with different shapes(circular, rectangular or other shape)(see column 16, lines 35-42 and column 19, lines 1-9).

Applicant argues that Albert does not teach at least one portion of perimeter edge of pixelated material segments is adjoined(zipper or tongue-in-groove fastener) to at least one portion of perimeter edge of another segment on page 5. The examiner disagrees with that since Albert teaches at least one portion of perimeter edge of pixelated material segments is adjoined by tongue-in-groove fastener(a joint made by fitting a tongue(801) on the edge of a board into a matching groove(805) on another board)(see figures 8A-8D; column 16, lines 35-42 and column

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17, lines 1-8). Zipper has the same function as tongue-in-groove fastener and zipper is well known in the art for fastening the adjacent edges together; and one ordinary skill in the art will select the Zipper for fastening the adjacent edges together if she/he needs to.

Applicant argues that Albert et al as modified fail to disclose a heat-sealed, sonic-weld, joint or hook-loop fastener, stapled joint, glued or adhesive joint, riveted joint, button-hole joint sewed or stitched seam joint or knotted seam joint on page 6. The examiner disagrees with that since Albert et al have disclosed a large display can be formed by seaming a plurality of tilt displays(see figures 8A-8D and column 16, lines 35-42) and Bastiaens et al have disclosed heat, ultrasonic or mechanical seal(see column 10, lines 25-33). A heat-sealed, sonic-weld, joint or hook-loop fastener, stapled joint, glued or adhesive joint, riveted joint, button-hole joint sewed or stitched seam joint or knotted seam joint are well known in the art for jointing a plurality of segment together and one skill in the art will choose one of these methods for jointing a plurality of segment together to achieve the best result of seaming.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lun-yi, Lao whose telephone number is (703) 305-4873.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at (703) 305-4938.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

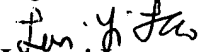
Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

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September 3, 2003


Lun-yi Lao

Primary Examiner